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ABSTRACT

The Powerful Learning Framework was developed by the Accelerated Schools Project in 1997. The framework is an approach that integrates curriculum, instruction, and context through five components. Powerful learning is described as authentic, interactive, learner-centered, inclusive, and continuous. This study was conducted to identify additional descriptors for the components of the Powerful Learning Framework so that the framework can be applied to teachers' learning. The responses of seven teachers to the concepts of powerful learning are used to derive characteristics of powerful learning for teachers related to the initial concepts of the model. For teachers, powerful learning contains these characteristics: (1) teachers can relate what they are experiencing to real issues and situations (authentic); (2) teachers interact collaboratively (interactive); (3) teachers become enabled to take charge of their own learning (learner-centered); (4) all teachers have equal access to learning opportunities (inclusive); and (5) teachers reflect on their learning experiences to make connections with previous learning (continuous). Results from the interviews with teachers show that the Powerful Learning Framework can be used to identify the powerful learning experiences of teachers. (Contains 13 references.) (SLD)

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Powerful Learning Framework for Teachers

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POWERFUL LEARNING FRAMEWORK FOR TEACHERS

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Introduction

Since the Accelerated Schools Project's inception in 1986, powerful learning has been and continues to be regarded as a critical element of the Project's model. The fundamental goal of the Accelerated Schools Project (ASP) is to improve student achievement by providing powerful learning opportunities to all students. Using the three principles of ASP as a base, the concept of powerful learning was originally introduced as an approach that integrated curriculum, instruction, and context. An equilateral triangle was presented with each side depicting three aspects of curriculum: (a) what students learn; (b) how the learning opportunities are created; and (c) how to produce the best context for that learning (Hopfenberg, Levin, & Associates, 1993).

As the Accelerated Schools philosophy and process were implemented in hundreds of schools, the need emerged for a more developed definition of powerful learning in order to make it more accessible to Accelerated Schools communities. By 1997, the "Powerful Learning Framework" was developed to include five components of powerful learning: authentic, interactive, learner-centered, inclusive, and continuous (ASP, 1997).

Powerful learning stands at the core of what it means to be an Accelerated School. The ultimate measure of the ASP's success is whether or not its schools are providing powerful learning experiences to all students. Until now, most of powerful learning discussions have centered around student achievement and learning, not limited to test scores but to include the quality and breadth of student work and enthusiasm for learning. As was found in the study of factors affecting student learning outcomes, what teachers know and what teachers do in classrooms are closely related to student learning experiences (Kim, 1992). Teachers must personally experience powerful learning prior to providing such powerful learning experiences to all students. If teachers are asked to prepare lessons that would provide powerful learning experiences for all students, it would be wise to ask teachers if they know what it is like to experience such powerful learning.

While the Powerful Learning Framework developed by ASP in 1997 explains the meaning of each component, the descriptions somehow do not cover the wide aspects of teachers' powerful learning experiences. A qualitative study was conducted, therefore, to identify descriptors which would enhance the Powerful Learning Framework to explain teachers' powerful learning experiences. The data were collected from the interviews of seven public school teachers regarding their powerful learning experiences. The data were analyzed according to the five components of the Powerful Learning Framework to identify the descriptors of the five components of the Powerful Learning Framework for teachers.

The theoretical framework for this study was based on the Powerful Learning Framework developed by Accelerated Schools Project in 1997. The general descriptions of the components of the Powerful Learning Framework were slightly modified to depict teachers' powerful learning experiences. Brief descriptions of the five components of the Powerful Learning Framework for Teachers are as follows:

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(1) AUTHENTIC: Teachers can relate what they are experiencing to real issues and situations.

(2) INTERACTIVE: Powerful learning includes interactive opportunities for individuals to collaborate with others in the learning process and to work together towards a common purpose. Through this interaction, teachers are able to share their expertise and knowledge with one another.

(3) LEARNER-CENTERED: Teacher exploration and continual discovery are essential to the powerful learning process. The learner's experiences and interests help shape the direction and content of the learning experiences. Teachers become enabled to take charge of their own learning.

(4) INCLUSIVE: Powerful learning focuses on giving all teachers equal access to learning opportunities. Challenges are structured to draw on the expertise of teachers who may not be as vocal or perceived of as smart.

(5) CONTINUOUS: Powerful learning strengthens connections between different learning contexts so that teachers perceive knowledge in a more holistic manner. Teachers can apply existing knowledge to what they have already learned and make connections between different areas.

The purpose of the study was to identify additional descriptors for the components of the Powerful Learning Framework so that the framework can be applied to a broader school community members, including teachers. The paper is organized in three sections. First, teachers' powerful learning experiences are described in their own words. Second, the results of the analyses of the teachers' experiences are presented and discussed in five categories of the Teachers' Powerful Learning Framework components. The paper ends with conclusions and recommendations.

Teachers' Powerful Learning Experiences

Teacher A: Cadre and Workshop

Cadre. I signed up to be a member of the Program and Curriculum Cadre because I thought we'd be talking about curriculum, and knew this was one place where I needed a lot of help. One member of the cadre talked a lot whenever she attended a cadre meeting. Two other teachers gave lots of ideas for how we could instruct the staff on powerful learning. There were a couple of teachers who did not volunteer to take on tasks outside of cadre time or add much to discussions. Two teachers on the cadre volunteered to teach mini lessons to the staff to model the powerful learning components. Being new to both school and teaching, I did not feel that I had much to offer during cadre meetings, so I stayed pretty quiet.

Our cadre decided to give the Powerful Learning Teacher Assessment to all of the teachers in the spring so that we could see if teachers became more confident about their abilities to incorporate the powerful learning components into their teaching. The first time that I really felt useful to my cadre was when the assessment results needed to be tallied. Being a math teacher, I felt comfortable volunteering to do the tallying. My first time up in front of the entire staff came when I reported out the assessment results at a School-as-A-Whole (SAW) meeting.

Workshop. I had a rough time last school year. Besides my weakness with classroom management and discipline, I was almost clueless as to what I should be teaching. I survived the year by scrounging ideas from everywhere and everyone.

The powerful learning experience began during a workshop I attended during summer. The workshop was on cooperative learning. This was a topic that I was especially interested in

because I had found little success in having my students work together, and I was eager to learn how to make group work more effective. Much of the time, when asked to work together on a project, the students within a group left the work up to one or two people. The others in the group distanced themselves from the activity and often became discipline problems. I found myself less and less willing to risk putting students in groups to work and yet wanted my classroom to be more interactive and inclusive.

The workshop instructors began the training by talking about something I had not thought about before. They said that members within a group enter the group with preconceived ideas about the other members. Some people are looked upon as being leaders. Some are thought of as being intelligent, talented, or creative; others as not so talented or smart. Some members are viewed as productive and others as lazy. This is true for children, as well as for adults. They went on to explain that cooperative learning activities do not work when an assignment can be left up to one or two members of the group to complete. The leaders will take over and the other members of the group, feeling less confident, will sit back and let the leaders do the work. Effective group projects or activities are those designed with the whole group in mind. Each group member must be responsible for a part of the project in order for the activity to be completed successfully. These ideas and the difficulty of designing such activities became clearer to me as we worked in groups of five to develop a lesson on fractions.

It was challenging and fun to design a group lesson that ensured all members of a cooperative group play significant roles. We built on one another's ideas and were proud of our completed project. When the small groups shared their lessons with the large group, it was interesting to me that not all of the adults in the room had understood the main concept presented in the workshop. The activity had to be designed so that each group member became responsible for, and essential to, the success of the project. Not all of the small groups built that requirement into their lessons. I could easily see how students completing those lessons could fall into the pattern of giving up the work to a few members of the group. That is what had been happening over and over in my classroom the year before.

Teacher B: SAW and Vocabulary Lesson

SAW. I became a member of the Student Success Cadre during my first year. The cadre had piloted the Grade Improvement Project (GIP) in the previous year. Volunteer teachers, administrators, and instructional associates were assigned to mentor two or three students whose grades were all D's and F's. The mentors interviewed the students and checked up on their 'gipees' every so often to see how they were doing in their classes. They had the students bring them grade checks every two weeks. The end-of-the-year results of the project showed improvement of grades for many of the students in the project. The cadre gathered feedback from the staff and revised the program during the summer based on the suggestions made by the staff.

In the fall, two of the cadre members presented the revised GIP at a School-as-A-Whole (SAW) meeting. No questions were asked and the proposal was easily passed with consensus. In the following week, however, some teachers began to question the decision made at the SAW meeting when they realized the level of commitment required from them. A request was sent to the steering committee to re-examine the decision made. This was a confusing and difficult time for our cadre because so much time, effort, and thought had gone into planning for the revised GIP. Many cadre members strongly voiced that every adult in the school should participate in the program so that the maximum number of students could be affected. "If the SAW reached consensus and a decision was made, how can a small group ask that the decision be re-

examined?" "Why is mentoring two students so much to ask of people when the results of the effort can have such a big payoff?" At the recommendation of the steering committee, the SAW reviewed the consensus process and decided that consensus should have two requirements: (a) Stakeholders are given the opportunity to give input into upcoming proposals before they are presented for consensus and (b) All consensus proposals get out to the stakeholders well in advance of the meeting where consensus will be taken. The SAW decided to re-examine the decision regarding the GIP based on the second requirement for the consensus. The SAW decided that the GIP should be continued to be voluntary and that every staff member should be involved in one or more ways to support students beyond the classroom.

This experience with decision-making was very powerful for me. In many ways, it was messy and uncomfortable. People expressed strong and differing opinions. The school's method of coming to decisions was questioned. But, to me, this opportunity to exercise choice paid off in big ways. Individual voices were heard. People got involved and cared about the outcome. We ended up with a decision that everyone was willing to carry out.

This got me thinking about the kind of classroom environment I want to create. I want to create a learning environment where (a) individual student voices are heard, (b) students get involved in their learning, (c) students care about the outcomes of their education, (d) students take responsibility for their assignments, and (e) students understand concepts and use them to build new understandings. I began to think that the way to create this kind of learning environment was to provide my students with choices. This was scary because my teaching up to this point had been very teacher-directed. This was all that I knew because, pretty much, it had been the way that I had been taught. Slowly, I have begun to consciously build choices into my curriculum and make the student voice more a part of the classroom.

Vocabulary Lesson. Last year, I taught a unit on the novel, The Outsiders. I wanted the students to be familiar with the vocabulary presented in the book so that they could read with understanding. I assigned my students to write definitions of the 30 words from the first four chapters. I was amazed at the large number of students who did not complete the assignment. I asked one student why he did not turn in the assignment. He answered, "I could have spent a lot of time looking up all of those words. I could probably even have memorized the definitions for those words in order to pass a test. But, after the test, I would not remember what any of the words meant. It did not seem worth doing the assignment." I remember thinking, "Wow, he's right! That assignment had very little to do with learning."

This fall, I changed my approach to teaching the vocabulary in The Outsiders unit. I took the same 30 words and asked each student to choose the word of his or her choice. Each student became an expert on the word and was responsible for preparing a poster of the word that included a definition of the word, a synonym, an antonym, and the sentence where the word was used in The Outsiders. All students were responsible for recording the words that were presented in the class. Based on the words presented, students made predictions of what might happen in the upcoming chapters. Student involvement and interest in this assignment was very high. I noticed that students recognized the vocabulary when they encountered the words in context and displayed a high level of familiarity with the words and their meanings.

Teacher C: Collaborative Teaching

It is through collaborative experiences that I have learned the most about powerful learning and teaching. During my first year, the school implemented grade level teams. As a Language Arts teacher, I became a member of the sixth grade team and worked closely with a

science teacher, a math teacher, and a social studies teacher. We were given a common preparation period each day. We met regularly a couple of times each week to develop curriculum, conference about students, and discuss instructional and classroom management strategies. I especially appreciated being able to share the concerns and problems that I was having regarding my students with other teachers who worked with those same students.

As I worked with the team to develop and teach two integrated units, I learned a lot about powerful learning as follows:

(1) The units the team developed were richer and more developed than any I had created on my own because we built on one another's ideas and stretched each other's imaginations.

(2) Working on a project with a team can be energizing and fun.

(3) Because I was responsible for teaching part of a unit developed by a team, I was more willing to try new things, put forth more time and effort in gathering materials, and face clutter and potentially messy activities.

(4) Being responsible for a portion of a group project caused me to take the work seriously, complete tasks on time, and not cut corners because the other members of the group were counting on me.

Teacher D: Presentation

I was asked to deliver a presentation to about 40 masters and credential students. It was during this presentation that I had my 'aha' experience. I found myself up at a white board explaining the five components of powerful learning. Members of the audience asked me to define more fully what each of the components meant. I remember giving the example of a music store owner. "If a music store owner wants to interest buyers in coming into his store, and he knows that consumers are listening to rap music, then he will fill his shelves with CDs of rap artists, not country or western artists. It's like that with curriculum. It's essential that the teacher makes the curriculum authentic to help the students see how it relates to their own lives. So, like the consumer at the music store, they buy it." A participant raised her hand and said, "what you're doing makes sense." And, at that moment, the light went on for me. My students had a better opportunity to learn because I had taken the words and concepts about powerful learning that I had been exposed to. I had made them come alive in the lessons that I had developed. It did make sense!

Teacher E: Teaching Notes

When my school became an Accelerated School, I joined the Powerful Learning focus group. We met for an hour every other week to discuss articles supplied to us by the National Center and to share innovations that we were trying in our classrooms. It was during that year that I began the practice of recording notes in my daily planning book about the effectiveness of my lessons. I believe that this practice has improved my instruction dramatically. I scratch out activities that do not seem to be motivating or understood well, and make modifications in others. I highlight lessons that work well, where I see the lights come on for my students. The beauty of teaching in a middle school is that I get to teach a lesson four or five times during the day, and by the end of many days, can transform a rather weak lesson into a much more powerful one. Trying lessons out on students, with an eye for the students' reception of the concepts you want to get across, is the one true way that I've found to develop powerful lessons.

I have developed my own personal definitions of powerful learning. I try to keep the following things in mind as I prepare my lessons and work with my students:

(1) Powerful learning has to have a hook. The instructor has to latch onto the students and novelty is the perfect hook. It's also important that I meet the needs of my visual, auditory, and kinesthetic learners.

(2) Doing a hands-on activity and leaving the lab is not powerful learning. Students need to do things that they have to talk about. There needs to be a closure built into a lesson so that students can use what they have learned.

(3) The classroom environment needs to be pleasant, comforting, and trusting. You need to give them mutual respect and listen to your students carefully. They need to learn to trust you. Then they will be open to learning the concepts and skills that you want to teach.

(4) Most important, I have to believe in my students and let them know it.

Teacher F: Station Idea

One of the things that I love the most about teaching is going into a classroom and helping kids accomplish something. When I first started teaching, I had all of these powerful ideas, but found that they weren't working very well. It seemed that no matter how excited I was about an idea, the kids were bored. I could see this because there were a lot of behavior problems in the class and very little work was being turned in. At the end of the day, I had very little sense of accomplishment, for the kids or for myself.

Midway through the year, I decided that I needed to do something really different. I had seen a film in which teachers used stations. I was eager to try it out in my own class, but was concerned about all the preparation involved and whether I could manage pulling it all together. After I talked to some teachers, I decided to try it. My feeling was, 'better take the risk rather than lose these kids.' I organized my first station experiment around one big idea--Cells. Then, because I had a class of kids with very different experiences, I decided to organize the stations around Gardner's seven intelligences. As kids moved through the different stations, they had a chance to draw and build on different skills, including kinesthetic. It worked out really well. Kids who had struggled and dragged their feet throughout previous lessons started to get really excited about what they were doing. They volunteered to help other kids and to talk about what they had done with the rest of the class. In addition to observing changes in my class, I asked the students for written feedback before and after I had tried the station idea. They told me that they much preferred the way that I was teaching now.

I have continued to explore the use of stations and other ideas with my current classes. I discovered when I changed my instructional style to a station format, my role changed. Adapting myself to meet the needs of my students is the challenge, which when met, brings about the joy of teaching.

Teacher G: Integration Cadre

I stumbled across Schools for the 21st Century, by Phillip C. Schlechty, in the bookstore during summer. Reading this book turned me on to a personal journey in educational reform. Schlechty validated the work that our school had been undertaking during the last five months of school reform process. He described the importance of creating a shared vision. He validated the reservations and negative feelings that I had been experiencing. He inspired me to work with others at my school to invent a school "in which both teachers and students have increased opportunities for success--schools in which every teacher is a leader, every leader is a teacher, and every student is a success."

I chose to join the School Integration Cadre. This cadre's challenge was to eliminate isolation between students enrolled in our regular, bilingual, and special education programs. I

was anxious to work with others on this cadre to eliminate the 'us' and 'them' mentality that permeated the student, staff, and parent communities. I was impressed with our seriousness. I also realized that we would not just meet a few times, arrive at common understandings, and implement a schoolwide program for student integration. After many meetings spent in hypothesizing why integration was a challenge at our school, we decided to take a break from hypothesizing to doing something. One of our hypotheses stated that bilingual students didn't feel valued because all of the signs in the office, computer lab, and library were printed only in English. Our first action plan was to have all of the existing signs translated into Spanish, printed and hung. The librarian was pleased to help us with the task. We noticed that every new sign that went up in the computer lab or library was posted in both languages. One day our cadre got a note from the school secretary, thanking us for making her aware of the importance of valuing the Spanish language. She wanted to let us know that, although she was a beginner in Spanish, she had researched how to translate the message on the phone attendance line and had included a Spanish message on the tape. One cadre member went to a teacher's supply store and brought back a poster to hang in the office that greeted parents and students in a dozen different languages. These were small, but important first steps in creating a more accepting culture. Our cadre felt that we were beginning to make a difference.

Results and Discussion

(1) AUTHENTIC: *Teachers can relate what they are experiencing to real issues and situations.*

The original Powerful Learning Framework states that authentic lessons are relevant to the learner, have recognizable goals, and build connections to the real world (ASP, 1996). When teachers found experiences to be relevant and meaningful to them, they were motivated to engage themselves in the activities that had recognizable goals. The importance of motivation was confirmed by Albaili (1997) who discovered motivation to be the most powerful discriminating factor separating between low-, average-, and high-achieving adult students. The teachers indicated that they were self-motivated and engaged in the learning processes as they worked on some recognizable goals. Whether teachers were motivated by other people or by circumstances, they were all self-motivated to the point of actually engaging themselves in the learning processes.

The results indicated that the majority of the teachers were self-motivated, that is, willing to engage themselves in the learning experiences without external encouragement. The teachers had sensed the needs to do something to improve the conditions they were in. Teacher A sensed the need to improve his classroom management skills when he joined the workshop. Teacher F decided that she "needed to do something really different" when she had very little sense of accomplishment for the kids or for herself at the end of her teaching. Teacher G's sense of the need for the whole school to improve in order to help all students succeed was validated while she was reading a book. The results also seem to indicate that teachers can be gradually motivated as they are engaged in the activity. Teacher C was placed in the grade team as a school's implementation plan. As she worked with other teachers in the team meeting, she realized the value of team work and was motivated to engage in the activity because she found the activity meaningful to her.

The study found that recognizable goals did not have to be concretely specified at the starting point for teachers to experience authentic powerful learning. Teacher G joined the School Integration Cadre with a goal of eliminating isolation among students. She had her powerful learning experience when she saw bilingual signs all over the school. Teacher A joined the workshop with a goal of improving his classroom management skills, but experienced his

powerful learning when he developed a truly collaborative lesson with other teachers. These examples seem to validate the relationship between little wheels and big wheels of the ASP concept (ASP, 1996). Powerful learning experiences are possible through little wheels of small accomplishments towards the accomplishment of the big wheel, that is, the recognizable goal.

Another important finding of the study is that carefully planned lessons are inconspicuously absent in these authentic powerful learning experiences of teachers. It may be because teachers have more traits than students to experience powerful learning as claimed by Orlofsky and Smith (1997). They found several distinctive, positive general characteristics that are more developed in adults than they are in younger students: (a) Adults are willing and eager to work; (b) Adults are goal oriented; (c) Adults are analytical in that they have developed powers of analytical thinking and concentration, as well as the ability to assimilate many pieces of information and retain the information; (e) Adults have mature intellects; and (f) Adults are psychologically mature, with a strong sense of self.

(2) INTERACTIVE: *Powerful learning includes interactive opportunities for individuals to collaborate with others in the learning process and to work together towards a common purpose. Through this interaction, teachers are able to share their expertise and knowledge with one another.*

As much as children learn through interaction with people and materials in the environment, adults also learn by interacting with people and materials in the environment (Baptiste, 1996). Burke (1997) stated that adults might need the interaction with their colleagues to stimulate them to learn and to provide motivation. Other researchers also found that interaction in cooperative groups had a better effect on learning than traditional direct instruction (McInerney, McInerney, & Marsh, 1997).

The results indicated that different ways existed for teachers to interact. Whereas Teacher A's experiences with his cadre and the workshop both represent collaborative activities with other teachers, yet a difference existed in the engaging ways. In the cadre, Teacher A's participation was clearly a component of the whole accomplishment of the cadre. His engagement was not necessarily working with other teachers. He tallied the survey results and presented the result to the audience on his own. Tallying and presenting the result were part of the whole project of the cadre, which was to assess teachers' teaching skills backgrounds. The results seem to indicate that just providing opportunities for individuals to make contributions for the group's goal can create an opportunity for an individual to experience powerful learning. The downside of this model, however, is that the whole work can be completed by some members of the group. This means powerful learning experiences are limited to only those participating members.

Teacher A's experience in the cooperative learning workshop, on the other hand, was quite different in nature. He experienced what it was to work collaboratively with other teachers. This was similar to his previous experience where each group member must be responsible for a part of the whole project in order to successfully accomplish the goal of the group. The key difference, however, was expressed in his statement, "We built on one another's idea." His team designed the work in such a way that ensured "all members of a cooperative group played significant roles." He could see the differences between the truly collaborative product and the product completed by one or two actively engaged members of the group. Teacher C articulated well about the results of such true collaboration. "The units the team developed were richer and more developed than any I had created on my own....Working on a project with a team can be energizing and fun.... I was more willing to try new things...Being responsible for a portion of a

group project caused me to take the work more seriously, complete tasks on time, and not cut corners because the other members of the group were counting on me."

Teachers' interaction with other teachers also can happen in a different setting where they are not equal partners, such as in presentations. Teacher D's "aha" experience came about as she interacted with participants in the audience. As she was meeting the demands made by the participants who had pressed her to provide a clearer explanation of her presentation, she made a connection between her presentation and her teaching in classroom. Teacher G's case is a good reminder to the school teachers that more meaningful school changes can occur when teachers collaborate with school staff who are not often invited to participate in school activities or decision making processes. Teachers' interactions can also occur with students. By designing a lesson that was interactive among students, Teacher B also interacted with students. Rather than dictating the assignment, he provided, with minimum guidelines, opportunities for students to choose the word and be creative in presentations. The lesson provided powerful learning experiences for the students as well as the teacher himself.

While collaboration with students is often overlooked in the discussion of teachers' collaborative activities, the study identifies another more often neglected partner, that is, self. Teacher E was able to improve his teaching through his writing notes. Over the years, he was able to develop his own personal definition of powerful learning through his teaching notes. Lastly, Teacher B's experience in the decision-making process brought a unique aspect of interaction. As a new teacher who was still unfamiliar with the culture of the school, he was able to observe and ride the wave in the school. This case suggests that just mere observation and remote participation in interaction should not be considered as an unfavorable condition for powerful learning.

(3) LEARNER-CENTERED: *Teacher exploration and continual discovery are essential to the powerful learning process. The learner's experiences and interests help shape the direction and content of the learning experiences. Teachers become enabled to take charge of their own learning.*

The learner-centered aspect of Powerful Learning for teachers is expressed in different ways, including using one's own strengths or unique knowledge and skills meaningfully, taking charge of one's own learning, being accountable, willing to try new things, and self-processing through observing others.

Teacher A did not wait until others recognized his strengths. He explored for the opportunity to make his contribution to the cadre and offered his unique knowledge and skills to produce an outcome for the cadre. The cooperative group at the workshop provided a challenging and supportive environment for him to take charge of his own learning of what true cooperative learning was. The results shows that taking charge of one's own learning extends to completion of actual production, such as creating one's own lessons or presentations. Whether the tasks were done individually or collaboratively, teachers were self-directed and accountable for their responsibilities.

Teachers' exploration and continual discovery were evident in their powerful learning experiences. Teacher B was willing to try a new instructional strategy. Teacher C was willing to try new lessons and began to think about a productive attitude as she took the work seriously, completed tasks on time, and not cut corners because others were counting on her. Teacher F was initially concerned about her ability to make necessary preparations as well as to manage pulling it all together, but determined to take a risk. Teacher G was willing to try testing a

hypothesis to find out if bilingual students indeed felt not valued because of English-only signs in the school.

The study found that learner-centeredness did not necessarily mean that the learner had to be at the center of the learning experience. Bandura and Walters (1963) emphasized the value of vicarious learning acquired through observing a model. The results indicates that vicarious learning can become powerful learning experience as seen in the case of Teacher B's observing the whole school making shared decisions.

(4) INCLUSIVE: *Powerful learning focuses on giving all teachers equal access to learning opportunities. Challenges are structured to draw on the expertise of teachers who may not be as vocal or perceived of as smart.*

The results showed that the inclusive aspect of teachers' powerful learning experiences was expressed in providing equal opportunities to participate, including all members, hearing every voice, and making everyone accountable. Teachers were given equal opportunities to participate in the cadres' activities. Teacher A did not participate much at first because he did not feel that he had much to offer. When he realized that he could make a contribution to the cadre's work, the event turned out to be a powerful learning experience. One needs to be cautious in that providing equal access is not a sufficient condition for powerful learning experience. In Teacher A's cadre, some teachers decided not to participate by choice even though they were provided with equal opportunities to participate.

True inclusiveness, therefore, means consciously structuring challenges to include everyone. Teacher A was able to tell the difference when all members were truly encouraged to be included in his workshop activity. Including everyone does have a cost. As Teacher B stated, the process was "messy and uncomfortable." This process, however, proved to be a powerful learning experience for the teachers at that school as they realized that all teachers had equal opportunities because individual voices were heard. Everyone was involved and cared about the outcome. The final product was the decision that everyone was willing to carry out.

Finally, the study found that inclusiveness extended beyond just including everyone in the activities. It included accountability of every member of the group. Everyone was responsible for his or her action and accountable towards each other. The outcome of the group's task depended on everyone who was included in the task. All members shared equal responsibility as they were given equal opportunities to participate.

(5) CONTINUOUS: *Powerful learning strengthens connections between different learning contexts so that teachers perceive knowledge in a more holistic manner. Teachers can apply existing knowledge to what they have already learned and make connections between different areas.*

The continuous aspect of Powerful Learning was most evident in every teacher interviewed in this study. Reflection was the most significant characteristic of the powerful learning experiences of these teachers. Reflection was not just centered around the activity or event experienced. Teachers applied the learned principles to other settings, made future plans for improvement, and changed their attitudes. Teacher B created a democratic classroom environment to provide his students with choices after observing the democratic process occurred in the SAW. Teacher B made connections between what he experienced in the SAW to his classroom, and actualized the result of his reflection in his teaching.

The continuous facet of Powerful Learning is not just limited to connections between different learning contexts. It was expressed as deeper understanding or growth of knowledge in the same learning context. While Teacher A made a connection between his experience in the

cooperative workshop and his students' experiences in the classroom, the real connection was the growth from his old to new level of understanding of cooperative work. His powerful learning experience in the workshop was a continuous experience of collaboration. He finally realized the need to design collaborative work so that all members of the group would be responsible and essential to the success of the group work. Teacher E's recording notes was also a powerful learning experience because the activity provided him with the opportunities to continuously seek better ways to improve his teaching.

The powerful learning experiences also allowed teachers to reflect on themselves. Teacher C discovered that collaboration was energizing and fun for her. She also found out that working with someone else helped her to re-evaluate herself in the classroom, such as finding herself more willing to try new things. Teacher F discovered that adapting herself to meet the needs of her students was a challenge which brought about the joy of teaching. She not only continued to explore the use of stations but also other teaching ideas.

Conclusions and Recommendations

The results indicate that the Powerful Learning Framework developed for students can be used to identify teachers' powerful learning experiences, with expanded descriptions to include teachers' situations. The results suggest that powerful learning experiences for teachers are authentic, interactive, learner-centered, inclusive, and continuous.

First, powerful learning experiences for teachers are authentic. Teachers find the experiences relevant to them and are motivated to engage themselves in accomplishing goals. The order of motivation and engagement is unimportant. Teachers can be self-motivated by their own needs to improve and engage themselves in activities with the goal to accomplish desired changes. On the other hand, teachers can be motivated after they find the engaged activities meaningful and relevant to them. Recognizable goals need not be specified in details initially for teachers to experience powerful learning. Teachers have powerful learning experiences in the small successes as they move towards accomplishing the big recognizable goal.

Second, powerful learning experiences for teachers are interactive. There are different ways to be interactive for teachers. One way to interact is to work on parts individually and assemble individuals' works to accomplish the whole activity or project. The more desired way of interaction is to work collaboratively with one another from the beginning to the end. Teachers collaborate with other teachers, staff, students, and the audiences at workshops. Another important, yet often neglected, partner for interaction is self.

Third, powerful learning experiences for teachers are learner-centered. Teachers use their strengths, take charge of their own learning, are accountable for outcomes to other members, and are willing to try new things. Learner-centered experiences can be powerful learning experiences through thoughtful observations with remote participation.

Fourth, powerful learning experiences for teachers are inclusive. The contexts that promote inclusiveness are where teachers are given equal opportunities to participate or make contributions; all members are included; every voice is heard; and everyone is made accountable.

Lastly, powerful learning experiences for teachers are continuous. Reflection is the most effective element in the continuous aspect of teachers' powerful learning experiences. Through reflection, teachers apply their learning to other settings, make future plans for improvement, experience personal and professional growth, and change their attitudes.

The study shows that teachers make connections between their powerful learning experiences and their teaching practices. According to Knowles' andragogical assumptions, that

is, the assumptions about adult learners, teachers have higher propensity to readily experience powerful learning than children (Knowles, 1984): (a) Adult learners are responsible and self-directed; (b) Experience is valuable, and adult learners are a rich source of information; (c) Learning should focus on the things one needs to know to cope with real life situations; (d) Learning is life-, task-, or problem-centered; and (e) Motivation is internal, including increased job satisfaction, self-esteem, and improved quality of life.

This study identified more facts about teachers' powerful learning experiences. It will be a worthwhile investment to replenish teachers' environments with powerful learning experience opportunities. While teachers can initiate their powerful learning experiences on their own, learning and self-direction for adult learners are promoted by feedback (Kasworm, 1997). Pre-service and in-service training sessions can be carefully designed to provide teachers to experience powerful learning. Instead of turning out clones and robots who teach as they are told, we can foster teachers to take responsibility for their own learning and growth (Carter & Curtis, 1994). Pre-service and in-service training sessions can provide teachers with opportunities for (a) continuous improvement with a series of small successes; (b) collaborative interaction with a variety of people in school communities; (c) experimentation of new things and demonstration of their own learning; (d) equal participation and contributions; and (e) continuous professional and personal growth.

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